

VOLTAGE RANGE: 50 - 1000V

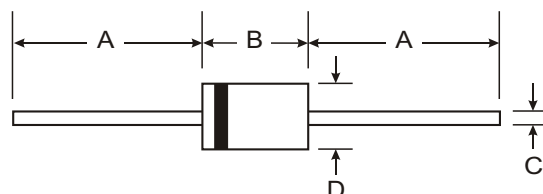
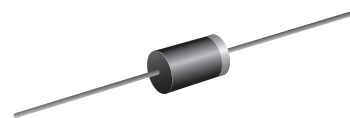
CURRENT: 1.0 A

Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

- Case: DO-41, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Approx. Weight: 0.35 grams
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	M100A	M100B	M100D	M100G	M100J	M100K	M100M	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A =100°C	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _A =75°C	I _{FSM}	50.0							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.0					1.1		V
Maximum full load reverse current full cycle average 0.375" (9.5mm) lead length at T _A =55°C	I _{R(AV)}	100.0							μA
Maximum DC reverse current at rated DC blocking voltage T_A=25°C T_A=100°C	I _R	1.0 50.0							μA
Typical reverse recovery time (NOTE 1)	t _{rr}	2.0							μs
Typical junction capacitance (NOTE)2	C _J	15.0							pF
Typical thermal resistance (NOTE 3)	R _{θJA} R _{θJL}	50.0 25.0							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150							°C

NOTES:

(1) Measured with I_F=0.5A, I_R=0.1A, I_{rr}=0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES M100A THRU M100M

FIG. 1 - FORWARD CURRENT DERATING CURVE

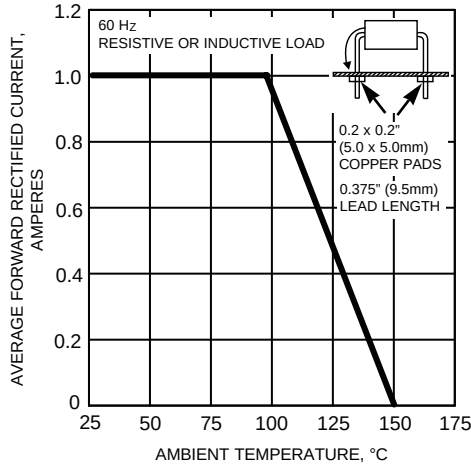


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

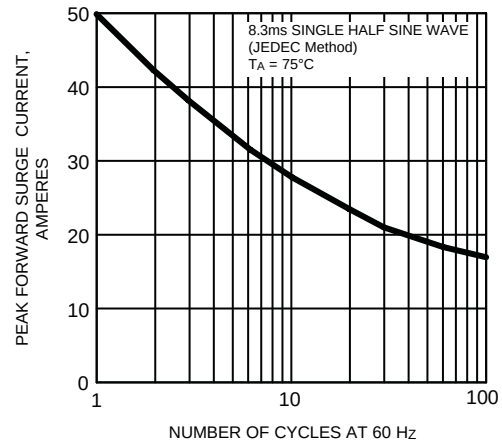


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

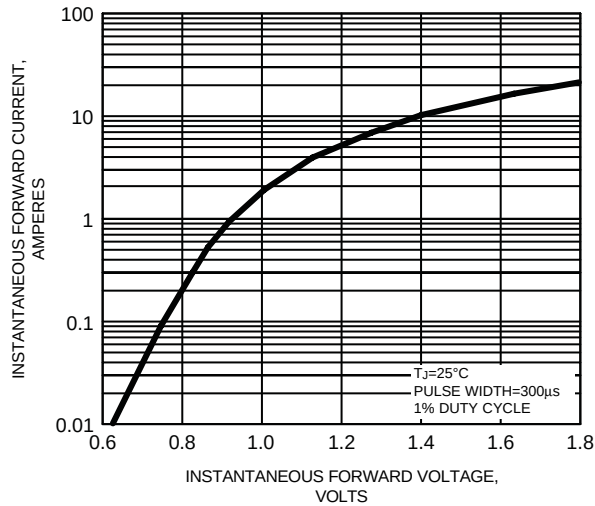


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

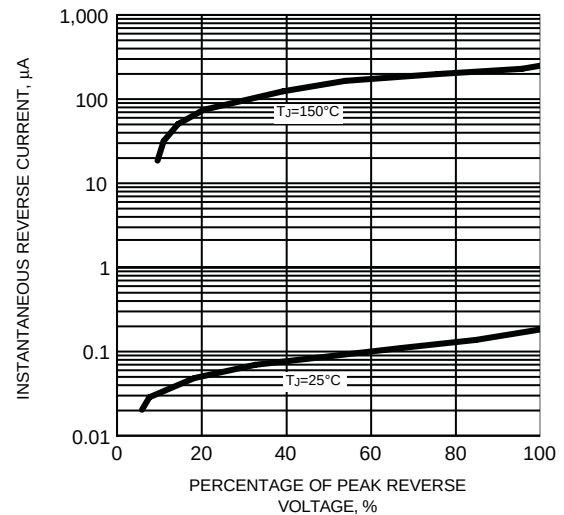


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

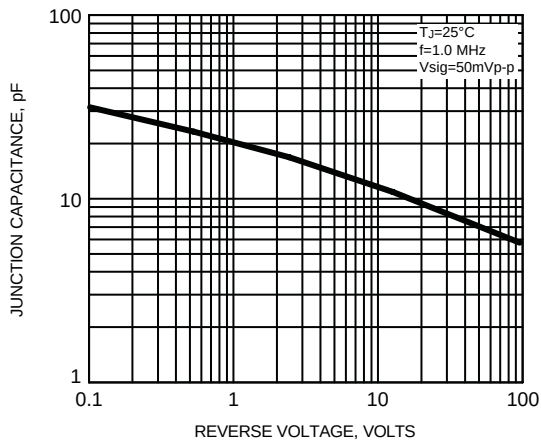


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

